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10/549,875

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Toshiya Noritake

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EXAMINER

DAZENSKI, MARC A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/549,875	Applicant(s) NORITAKE, TOSHIYA	
	Examiner MARC DAZENSKI	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) 6 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09-16-2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claim 6 is objected to because of the following informalities: lines 2-3 of the claim read, "...wherein the data processor receives at least two data streams, including the data stream..." By using the term "the data stream," it is not clear to which of the "at least two data streams" the applicant is referring. The examiner interprets this to mean, "any of the at least two data streams." Appropriate correction is required.

Claim 16 is objected to because of the following informalities: lines 2-3 of the claim read, "...wherein there are at least two data streams to receive, including the data stream..." By using the term "the data stream," it is not clear to which of the "at least two data streams" the applicant is referring. The examiner interprets this to mean, "any of the at least two data streams." Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-9, 11-12, and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent 7,424,203), hereinafter referred to as Suzuki, in view of Saeijs et al (US Patent 7,376, 151), hereinafter referred to as Saeijs.

Regarding **claim 1**, Suzuki discloses a data reproduction transmission apparatus and data reproduction transmission method. Further, Suzuki discloses special reproduction transmission apparatus (400), which reads out an intra-picture bit stream from video audio information medium (50), and then supplies multiplexed coded data D_{out} to digital television (7) which is provided with an MPEG-2 decoder or the like, which reads on the claimed, “a data processor for receiving a data stream, including a plurality of packets, and playing back a content concurrently based on content data stored in the packets, each said packet having an identifier, the content data including a first code, which specifies a data location of a first portion of the content, and a second code, which specifies a data location of a second portion thereof,” as disclosed at column 14, lines 35-40; column 15, lines 20-21; column 5, lines 45-46; and exhibited in figure 9; the apparatus comprising:

data restructuring means (44) that interpolates B picture and P picture of fixed pattern having motion vector (0,0) of the difference value "0" between the I pictures extracted from picture memory (51), which reads on the claimed, “a dummy packet processing section, which makes a plurality of dummy packets, each having a dummy identifier that is different from any of the identifiers of the packets, and which generates a playback stream, including the dummy packets at predetermined intervals, based on the data stream received,” as disclosed at column 14, line 57 through column 15, line 3;

selector (49) which selects the multiplexed coded data during the normal reproduction, and during special reproduction selects the output of the B and P stream output unit (52), which reads on the claimed, “a switch, which receives the playback

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stream and which selectively passes the content data representing the first portion of the content in accordance with the first and second detection signals," as disclosed at column 15, lines 4-11; and

the output of the selector (49) is connected to the MPEG-TS multiplexing unit (48) which then outputs multiplexed coded data D_{out} to digital television (7) which is provided with an MPEG-2 decoder (11), which reads on the claimed, "and a decoding section for playing back the first portion of the content based on the output of the switch," as disclosed at column 15, lines 15-22.

However, Suzuki fails to disclose a detecting section for detecting any of the dummy identifiers by scanning the identifiers of the respective packets of the playback stream and then outputting a first detection signal upon detecting the first code and a second detection signal upon detecting the second code, respectively. The examiner maintains that it was well known in the art to include a detecting section for detecting any of the dummy identifiers by scanning the identifiers of the respective packets of the playback stream and then outputting a first detection signal upon detecting the first code and a second detection signal upon detecting the second code, respectively, as taught by Saeijs.

In a similar field of endeavor, Saeijs discloses recording and producing an MPEG information signal on/from a record carrier. Further, Saeijs discloses packet detector (84) which detects the receipt of each packet in the serial MPEG data stream applied to the input (11), generates a clock impulse for each packet detected, and the timing generator (110) then detects the time instants t_k of occurrence of the packets, which

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reads on the claimed, “a detecting section for detecting any of the dummy identifiers by scanning the identifiers of the respective packets of the playback stream and then outputting a first detection signal upon detecting the first code and a second detection signal upon detecting the second code, respectively,” as disclosed at column 16, lines 58-65.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the data reproduction transmission apparatus of Suzuki to include packet detector (84) which detects the receipt of each packet in the serial MPEG data stream applied to the input (11), generates a clock impulse for each packet detected, and the timing generator (110) then detects the time instants t_k of occurrence of the packets, as taught by Saeijs, for the purpose of generating a data stream suitable for trick-mode playback.

Regarding **claim 2**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). Further, Saeijs discloses dummy packet generator (100) generating dummy info of a certain length of time, this length of time being equal to the length of time of a packet or equal to a multiple of the length of time of a packet, which reads on the claimed, “wherein the dummy packet processing section generates the playback stream by inserting the dummy packets into the data stream at time intervals as defined by the playback duration of a given picture,” as disclosed at column 15, line 66 through column 16, line 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suzuki and Saeijs to include

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dummy packet generator (100) generating dummy info of a certain length of time, this length of time being equal to the length of time of a packet or equal to a multiple of the length of time of a packet, as taught by Saeijs, for the purpose of generating a data stream suitable for trick-mode playback.

Regarding **claim 4**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). Further, Saeijs discloses selecting only those packets of the packets P_k in the serial data stream that include information relating to one video program that will be selected, and then inserting dummy packets into the serial data stream via combining unit (96), which reads on the claimed, "further comprising an extracting section for continuously extracting, as a plurality of partial streams, a number of portions of at least one data stream from a storage medium on which the data stream is stored, wherein the dummy packet processing section inserts the dummy packet with the dummy identifier into each data location at which two of the partial streams are connected together," as disclosed at column 15, lines 53-63; column 16, lines 12-25, and lines 43-45; and exhibited in figures 8a, 8b, and 8c.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suzuki and Saeijs to include selecting only those packets of the packets P_k in the serial data stream that include information relating to one video program that will be selected, and then inserting dummy packets into the serial data stream via combining unit (96), as taught by Saeijs, for the purpose of allowing the data stream to be applied to a standard MPEG decoder.

Regarding **claim 5**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 4 above.

Regarding **claim 6**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 4 above.

Regarding **claim 7**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 6). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 4 above.

Regarding **claim 8**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). Further, Suzuki discloses supplying multiplexed coded data Dout to digital television (7) which is provided with an MPEG-2 decoder or the like, which reads on the claimed, "wherein the data stream includes compressed content data, and wherein the decoding section plays back the first portion of the content by decoding the content data," as disclosed at column 15, lines 20-21 and column 5, lines 45-46.

Regarding **claim 9**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 8). Further, Suzuki discloses video and audio information coded according to a predetermined information processing rule such as MPEG, which reads on the claimed, "wherein the content is related to video to be presented by switching a plurality of pictures one after another, the content data having been compressed by a bidirectional predictive coding method and wherein the detecting

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section detects a picture header code of an I-picture as the first code and a picture header code of the next picture, following the I-picture, as the second code, respectively,” as disclosed at column 4, lines 55-62 (wherein discerning between I-frames and non-I-frames using header codes is inherent to MPEG video).

Regarding **claim 11**, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 1, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 1.

Regarding **claim 12**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 2, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 2.

Regarding **claim 14**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 4, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 4.

Regarding **claim 15**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 5, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 5.

Regarding **claim 16**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the

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claim is the corresponding method claim to the apparatus of claim 6, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 6.

Regarding **claim 17**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 16). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 7, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 7.

Regarding **claim 18**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 8, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 8.

Regarding **claim 19**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 18). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 9, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 9.

Claims 3, 10, 13, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US Patent 7,424,203), hereinafter referred to as Suzuki, in view of Saeijs et al (US Patent 7,376, 151), hereinafter referred to as Saeijs further in view of Abelard et al (US Patent 6,823,131), hereinafter referred to as Abelard.

Regarding **claim 3**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). However, the combination fails to disclose wherein after having detected the second code, the detecting section detects the next dummy identifier by scanning the identifiers of the respective packets. The examiner

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maintains that it was well known to include wherein after having detected the second code, the detecting section detects the next dummy identifier by scanning the identifiers of the respective packets, as taught by Abelard.

In a similar field of endeavor, Abelard discloses a method and device for decoding a digital video stream in a digital video system using dummy header insertion. Further, Abelard discloses upon detection of the sequence error code, the decoder (9) rejects all data received before the error code and all data received in the future, up to the next Picture Header, which reads on the claimed, "wherein after having detected the second code, the detecting section detects the next dummy identifier by scanning the identifiers of the respective packets," as disclosed at column 15, lines 9-13.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suzuki and Saeijs to include upon detection of the sequence error code, the decoder (9) rejects all data received before the error code and all data received in the future, up to the next Picture Header, as taught by Abelard, for the purpose of generating a data stream suitable for trick-mode playback.

Regarding **claim 10**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 1). However, the combination fails to disclose wherein the detecting section detects, as the first code, at least one of a picture header code, a PES header code, a sequence header code, and a group of pictures (GOP) header code, and, as the second code, the same type of code as the first code, respectively. The examiner maintains that it was well known in the art to include

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wherein the detecting section detects, as the first code, at least one of a picture header code, a PES header code, a sequence header code, and a group of pictures (GOP) header code, and, as the second code, the same type of code as the first code, respectively, as taught by Abelard.

In a similar field of endeavor, Abelard discloses a method and device for decoding a digital video stream in a digital video system using dummy header insertion. Further, Abelard discloses the TS or PES packets are analyzed by first detecting Sequence headers, PES headers, or Picture headers, each of these headers having a predefined start code, defined by MPEG-2, and can easily be spotted in the incoming TS packet payloads or PES packets, which reads on the claimed, "wherein the detecting section detects, as the first code, at least one of a picture header code, a PES header code, a sequence header code, and a group of pictures (GOP) header code, and, as the second code, the same type of code as the first code, respectively," as disclosed at column 11, lines 6-11.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Suzuki and Saeijs to include the TS or PES packets are analyzed by first detecting Sequence headers, PES headers, or Picture headers, each of these headers having a predefined start code, defined by MPEG-2, and can easily be spotted in the incoming TS packet payloads or PES packets, as taught by Abelard, for the purpose of generating a data stream suitable for trick-mode playback.

Regarding **claim 13**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 3, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 3.

Regarding **claim 20**, the combination of Suzuki and Saeijs discloses everything claimed as applied above (see claim 11). Further, the examiner maintains that the claim is the corresponding method claim to the apparatus of claim 10, and therefore the limitations of the claim are rejected in view of the explanation set forth above in claim 10.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lin et al (US Patent 6,990,287) discloses fast motion trick mode using dummy bidirectional predictive pictures.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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